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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/802,281 | 03/17/2004 | Scott A. Camp | 224315 | 3626 |

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EXAMINER

GRAHAM, MARK S

ART UNIT PAPER NUMBER

3711

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/802,281

Applicant(s)CAMP ET AL. on**Examiner**

Mark S. Graham

Art Unit

3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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Claims 12-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 12, "said mounting portions" lacks proper antecedent basis.

In claim 13, "said channels" lacks proper antecedent basis.

In claim 14, "such tubular members" lacks proper antecedent basis.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6, 7, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Witmeyer. Note Fig. 5 of Witmeyer, which shows the horizontal separation between the impact plates of at least one-half of a horizontal width of the plates, and Col. 3, lines 1-26.

Claims 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanquist.

Sanquist discloses the claimed structure and may be used for the same purpose. Regarding claim 5, the elbow between the radial section and the horizontal section is considered the intermediate section at an acute angle.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 2, 8-11, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Witmeyer.

Regarding claim 2, absent a showing of unexpected results the exact spacing of Witmeyer's plates would obviously have been up to the ordinarily skilled artisan depending on the balance and rotational speed desired when a projectile hit a target plate.

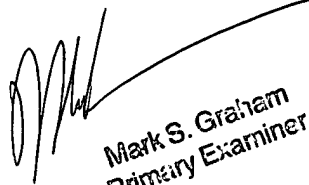
Concerning claims 8 and 9, the examiner takes official notice that both removal fasteners and welding are commonly known methods of joining elements. The type of joining system used by Witmeyer would obviously have been up to the ordinarily skilled artisan depending on the permanence desired in the connection.

With regard to claims 10, 13, and 14, Witmeyer states (Col. 3, lines 2-4) that any cross-sectional shape may be used. The examiner takes official notice that tubular cross-sectional shapes are commonly known and used as supports and would have been obvious to the ordinarily skilled artisan seeking a light strong support member. As to the type of fastening system note the examiner's above comments.

Wesley et al., Hummerson, Vaughan, Steidle et al., Lyon, Hauke, Merhal, Prichard, and Wu have been cited for interest because they disclose similar devices.

Any inquiry concerning this communication should be directed to Mark S. Graham at telephone number 703-308-1355.

MSG
10/12/04



Mark S. Graham
Primary Examiner